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ABSTRACT

The reference image data corresponding to one pixel block stored in a reference image line memory 6 is output to a stereo matching circuit 8. The comparative image data corresponding to a "search range" stored in a comparative image line memory 7 is output to the stereo matching circuit 8 according to an instruction of a search range address generator 13. The stereo matching circuit 8 calculates parallaxes by performing the stereo matching based on the reference image data and the comparative image data. A position where the search range S is set is corrected based on the amount of the deviation of an infinite distance corresponding point with respect to a position of the reference image data.